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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/629,040
Filing Date: July 28, 2003
Appellant(s): MAYO ET AL.

Paul H. Horstmann
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 09/21/2007 appealing from the Office action mailed 04/16/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2001/0049717	Freeman et al. ("Freeman")
5,987,504	Toga

2002/0099844 Baumann et al.

("Baumann")

7,110,962 Amon et al. ("Amon")

Apache: The Definitive Guide, 2nd Edition by Laurie et al. ("Laurie")

W3C.org,http://web.archive.org/web/19970606013505/http://www.w3.org/Protocols/HTTP/HTRQ_Headers.html, June 6, 1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

I. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

II. Claims 1, 2, 13, 15, 16, 17, 28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Freeman et al. (US 2001/0049717 A1), hereafter Freeman.

III. Regarding claims 1 and 16, Freeman discloses the information system of claim 1 and the method of claim 16, comprising a set of access subsystems each for use in accessing a persistent store in the information system in response to a client request from a client of the information system (Figs. 2A, 2B, 7B, 8A, 8B); transaction director that determines which of the access subsystems is to handle the client request in response to a set of client side information generated by the client, where Freeman's source subsystem corresponds to said client, destination subsystem corresponds to

said access subsystem, and service locator corresponding to said transaction director (Figs. 7B and 8A, [0255-0260,0275-0277]).

Furthermore, Freeman additionally discloses the claimed subject matter through the disclosure of a client (shown in Fig. 1) making a request for the execution of an application ([0098 and 0100]). Based on this request, which is generated by said client and thus contains client-side information, the receiving server (which in this embodiment represents said transaction director) searches for an access subsystem (in this case, the access subsystem is also a server) that hosts the application requested by the client, and routes the client request to that access subsystem/server ([0115, 0195, 0196]).

IV. Regarding claims 2 and 17, Freeman further discloses where the client-side information includes a set of information pertaining to the client (Fig. 7B, item 722; [0252-0253], where a source subsystem includes information (representing the client side information) used to identify the target subsystem, which, as [0275] shows, may be on another server; and, alternatively, in [0098, 0115, 0195] where the application requested by client determines to which server/access subsystem the request is routed).

V. Regarding claims 13 and 28, Freeman further discloses where the client-side information includes an indication of a location of the client ([0276-0278], where the event can be 'local' or 'remote' [0278] and where the client can be on the same server, and thus 'local', or not on the same server, and thus 'remote' [0275]).

VI. Regarding claims 15 and 30, Freeman further discloses where the transaction director assigns the client request to the access subsystems in response to the client-side information and a rank associated with each access subsystem ([0192 - 0194]).

Claim Rejections - 35 USC § 103

VII. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

VIII. Claims 10 and 25 rejected under 35 U.S.C. 102(b) as anticipated by Freeman, in the alternative, under 35 U.S.C. 103(a) as obvious over Freeman in view of Toga (5,987,504).

Regarding claims 10 and 25, Freeman further discloses where the client-side information includes a set of samples from sensors in an environment of the client, where sensors in Freeman's disclosure detect and insert into said client's request said client's UID (Fig. 7B, [0276-0278]).

Alternatively, if said UID disclosed by Freeman is not considered to represent information from sensors in the client's environment, than Freeman does not further discloses where the client-side information includes a set of samples from sensors in an environment of the client.

However, Toga discloses transmitting information, including User-Agent information along with a client request (Fig. 4), where said User-Agent information relates to the client, is determined, or rather, sensed by said client, and thus is

inherently gathered by sensors in said client's environment (Toga, col. 3 lines 58 – 60), where said sensors include the CPU, memory, hard disks, etc. working in conjunction to determine/sense the client's User-Agent.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman with that of Toga in order to provide the most amount of information possible about the requesting party to the party that will fulfill said request in order to ensure said request fulfillment was maximally compatible and efficient.

Thus in an alternative interpretation of Freeman, Freeman in view of Toga show claims 10 and 25.

IX. Claims 3, 7, 11, 12, 18, 22, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman in view of Toga.

X. Regarding claims 3 and 18, Freeman discloses the system and method according to claims 1 and 16.

Freeman does not disclose where the client-side information includes a set of information pertaining to a user.

Toga discloses where the client-side information includes a set of information pertaining to a user (where said information is represented by said user's e-mail address; col. 3 lines 14 – 17).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman with that of Toga in order to enable alternative modes of response to said request, such as via e-mail. Additional, said e-

mail address provides additional information about said requesting client. It is beneficial to provide the most amount of information possible about the requesting client in order to ensure the response to said request is maximally compatible and efficient.

XI. Regarding claims 7 and 22, Freeman. in view of Toga further disclose where the client-side information includes a hint on where a set of data targeted by the client request may be stored. Specifically, Toga discloses an HTTP client request message, which includes a file path (item 212 of Fig. 4) corresponding to the file requested. The file path directly relates to the location of where the data pertaining to the request is stored.

XII. Regarding claims 11 and 26, Freeman in view of Toga further disclose where the client-side information includes an indication of hardware capabilities of the client. Specifically Toga discloses displaying which operating system and web browser the client is using through disclosing the client's user-agent, which inherently discloses the client's operating system along with the client's web browser as a part of the user-agent (Fig. 4). Operating systems and web browsers both have basic hardware requirements that determine on which machines they will run, and thus being able to tell the operating system and web browser running on a particular machine gives an indication of that machine's hardware capabilities.

XIII. Regarding claims 12 and 27, Freeman in view of Toga further disclose where the client-side information includes an indication of a type of application that generated the client request. Specifically Toga discloses displaying which web browser, web page

parser or other device capable of generating an HTTP request the client is using which is inherently disclosed in the client's user-agent (Fig. 4).

XIV. Claims 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman in view of Baumann et al. (US 2002/0099844 A1), hereafter Baumann.

Freemen shows the system and method according to claims 1 and 16.

Freemen does not show where the client-side information includes information pertaining to a history of prior interactions with the information system.

Baumann shows the client-side information includes information pertaining to a history of prior interactions with the information system ([0061]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman with that of Baumann in order to be able to predict future client behavior based on past patterns and thus better serve client requests.

XV. Claims 5, 14 and 20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman in view of Amon et al. (US 7,110,962 B2), hereafter Amon.

XVI. Regarding claims 5 and 20, Freemen shows the system and method according to claims 1 and 16.

Freemen does not show where the client-side information includes a potential frequency of client requests from the client.

Amon shows where the client-side information includes a potential frequency of client requests from the client (col. 2 lines 37-43, col. 3 lines 32-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman with that of Amon in order to in order to be able to predict future client behavior based on past client requests (in this case, how frequently the client requests information) and thus better serve client requests as well as better allocate resources for fulfilling said requests.

XVII. Claims 14 and 29, Freemen in view of Amon further shows where includes a cookie that is stored in a client that originated the client request (col. 3 lines 36-43).

XVIII. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman in view of Laurie et al. (Apache: The Definitive Guide, 2nd Edition), hereafter Laurie.

Freemen shows the system and method according to claims 1 and 16.

Freemen does not show where thee client-side information includes a priority of a set of data targeted by the client request.

Laurie shows where thee client-side information includes a priority of a set of data targeted by the client request (Section 6.4, specifically the discussion involving understanding the use of quality score numbers).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman with that of Laurie in order to provide for a method for clients to specify how important their request is and what elements about their request are the most important so that all requests could be served in a manner that gave the most urgent requests attention the quickest, as well as ensuring that elements within a single request were delivered according to the clients preferences.

XIX. Claims 8, 9, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman in view of W3C.org (http://web.archive.org/web/19970606013505/http://www.w3.org/Protocols/HTTP/HTRQ_Headers.html; June 6, 1997).

XX. Regarding claims 8 and 23, Freemen shows the system and method according to claims 1 and 16.

Freemen does not show where the client-side information includes a cost indication with the client request.

W3.org discloses where said client-side information includes a cost indication with the client request, specifically by the use of 'type parameters' that allow the server to economise with regards to transmission time; higher values for type parameters such as 'dpi' result in higher costs of transmission http://web.archive.org/web/19970606013505/http://www.w3.org/Protocols/HTTP/HTRQ_Headers.html, Accept section).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman with that of W3.org in order to save network resources when possible, allowing for faster content delivery to said client and allowing more client requests to be managed.

XXI. Regarding claims 9 and 24, Freeman in view of W3.org further disclose where said client-side information includes a computational intensity associated with the client request, specifically by the use of 'type parameters' that allow the server to economise with regards to computational intensity. The specific example of sending black and

white images rather than color images in order to lower computational intensity is given; larger color images require more computational intensity to transmit on the server end and to display or convert on the client end (http://web.archive.org/web/19970606013505/http://www.w3.org/Protocols/HTTP/HTRQ_Headers.html, Accept section).

(10) Response to Argument

Regarding claims 1, 2, 10, 13, 15-17, 25, 27 and 30, rejected under 35 USC 102(b) in view of Freeman, Applicant argues that Freeman does not 'disclose a client that generates a set of client-side information to control which set of access subsystems is to handle a client request' as claimed in claims 1 and 16.

Specifically, Applicant argues that 'the source subsystem UID 722 of Figure 7B of Freeman is information generated by a subsystem inside a server 180 in the server farm 110.' However, in [0275], Freeman specifies that the source subsystem may be on different server than the destination subsystem. Thus, in this example, the source subsystem does indeed serve as the client, and the UID, generated at said source subsystem, serves as client-side information.

Freeman additionally meets the limitations said claims in another embodiment. Freeman teaches a client (shown in Fig. 1) making a request for the execution of an application ([0098 and 0100]). Based on this request, which is generated by said client and thus inherently contains client-side information, the server initially receiving the client request (which in this embodiment represents said transaction director) searches for an access subsystem (in this case, the access

subsystem is also a server, but is a different server than the initially receiving server) that hosts the application requested by the client, and routes the client request to that access subsystem/server ([0115, 0195, 0196]). The access subsystem/server that is able to process the client request is based on the application which the client has requested, and further the client request is routed based on this requested application, and therefore the access subsystem/server to handle said request is in respond to client-side information, as specified in claim 1.

Freeman thus meets the limitations of claims 1 and 16 in multiple embodiments, as discussed above.

Regarding claims 3, 7, 10-12, 18, 22, 25, 26 and 27, rejected under 35 USC 103, Freeman in view of Toga, Applicant argues that Toga does not compensate for the claimed features not shown by Freeman in claims 1 and 16. However, as shown above, Freeman shows all the features of claims 1 and 16. Therefore, Applicant's arguments are not persuasive.

Regarding claims 4 and 19 rejected under 35 USC 103, Freeman in view of Baumann, Applicant argues that Baumann does not compensate for the claimed features not shown by Freeman in claims 1 and 16. However, as shown above, Freeman shows all the features of claims 1 and 16. Therefore, Applicant's arguments are not persuasive.

Regarding claims 5, 14, 20 and 29, rejected under 35 USC 103, Freeman in view of Amon, Applicant argues that Amon does not compensate for the claimed features not

shown by Freeman in claims 1 and 16. However, as shown above, Freeman shows all the features of claims 1 and 16. Therefore, Applicant's arguments are not persuasive.

Regarding claims 6 and 21, rejected under 35 USC 103, Freeman in view of Laurie, Applicant argues that Laurie does not compensate for the claimed features not shown by Freeman in claims 1 and 16. However, as shown above, Freeman shows all the features of claims 1 and 16. Therefore, Applicant's arguments are not persuasive.

Regarding claims 8, 9, 23 and 24, rejected under 35 USC 103, Freeman in view of W3C.org, Applicant argues that W3C.org does not compensate for the claimed features not shown by Freeman in claims 1 and 16. However, as shown above, Freeman shows all the features of claims 1 and 16. Therefore, Applicant's arguments are not persuasive.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

John Frink, 11/09/2007

JMF

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